

DETAILED ACTION

Allowable Subject Matter

1. Claims 1,3,5,6,8,10, and 11 are allowed. The following is an examiner's statement of reasons for allowance: the prior art fails to teach or make obvious a method/apparatus of driving a brushless DC motor comprising: a rectifier circuit configured with a diode bridge circuit rectifying an AC voltage, a capacitor coupled between output terminals of the rectifier circuit and an AC power source being input to the rectifier circuit; an inverter driving the brushless DC motor; detecting a rotor position of the brushless DC motor by a position detector based on one of a back electromotive force of the brushless DC motor and a motor current; estimating the rotor position by a position estimator when a voltage between terminals of the capacitor is lower than a predetermined voltage, wherein the rotor position is not detectable by the position detector; and controlling the inverter by a controller based on one of the rotor position detected by the position detector and the rotor position estimated by the position estimator, wherein the capacitor has a capacitance that a ripple content in an output voltage of the rectifier circuit becomes not less than 90% in an output range in driving the brushless DC motor.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to RENATA MCCLOUD whose telephone number is (571)272-2069. The examiner can normally be reached on Mon.- Fri. from 5:30 am - 2pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lincoln Donovan can be reached on (571) 272-2800 ext. 37. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Renata McCloud/
Primary Examiner, Art Unit 2837

/R. M./
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